

## Claims

1 A storage area network having an aggregator server (3) that can access at least one remote storage server (6, 7), the aggregator server operating on a block level  
5 protocol and the remote storage server operating on a file level protocol,

the aggregator server (3) having a functional unit that maps files of the remote storage server to a respective series of blocks and inputs the block map to a block storage aggregation layer  
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2 A storage area network according to claim 1 in which the functional unit has a translation database of files to blocks and the aggregator layer has a pointer to the translation database

15 3 A storage area network according to claim 1 or claim 2 in which the functional unit provides a pointer to an application buffer and data from the remote storage server is placed directly into the application buffers from received transport protocol data units

20 4 A method of aggregating remote file level storage in a block level aggregation process, the method comprising

defining a file of the remote file level storage as a series of blocks,

maintaining a record of the block locations within the file,  
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providing the series of blocks for aggregation in the block level aggregation process and

providing access to the record of the block locations within the file from the aggregation process  
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5 A method according to claim 4 in which data retrieval speed is increased by establishing a retrieved data buffer location when an access request is transmitted to the

remote file level storage, parsing headers of the return data units and placing the data bytes directly into the retrieved data buffers

6        A method according to claim 4 or claim 5 in which each file is given a device  
5        identifier and the block level aggregator process has a total logical block to device  
      identifier and block mapping database and a device mapping database with pointers to  
      the record of block locations

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